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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,687	04/16/2004	David Leon	944-001.108-1	9596
4955 7590 05/04/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER ALAM, UZMA	
			ART UNIT: 2157	PAPER NUMBER
			MAIL DATE 05/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/826,687	LEON ET AL.	
	Examiner	Art Unit	
	Uzma Alam	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the application filed on April 16, 2004. Claims 1-36 are pending. Claims 1-36 represent a method for adaptively adjusting rate in a stream network.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-25 claim a computer program product comprising software product. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result.

Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data.

More specifically, the claimed subject matter provides for a software product. This produced result remains in the abstract and, thus, fails to achieve the required status of having real world value.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Bo et al. US Patent Publication No. 2004/0098748. Bo teaches the invention as claimed including a end to end bitrate based congestion control (see abstract).

As per claim 1, Bo teaches the method for adaptively controlling level of a receiver buffer in a client in a multimedia streaming network, the streaming network comprising a server for providing streaming data to the client, wherein the receiver buffer is used to compensate for difference between data transmission amount by the server and data usage amount by the client so as to allow the client to have sufficient amount of streaming data to play-out in a non-disruptive manner, said method comprising:

defining in the client [12] at least one parameter [network condition 27] for determining a rate adaptation operating range so as to carry out rate adaptation between

Art Unit: 2157

the server [11] and the client (the parameter is the network condition; pp 0060, 0092-00950110);

adapting in the server the data amount to a reception rate based on said at least one parameter (rate adaptive encoder 23; pp 0061, 0063, 0106); and

adjusting in the client packet transfer delay variation based on said adapting (rate adaptation 12 and 27, pp 0073-0075).

As per claim 2, Bo teaches the method of claim 1, wherein said at least one parameter comprises a minimum shift amount indicative of a difference between a sampling time and a transmission time of a packet at the server so as to allow the server to carry out said adapting based on the minimum shift amount (pp 0107, 0110).

As per claim 3, Bo teaches the method of claim 1, wherein said at least one parameter comprises a target shift amount indicative of a shift amount greater than a difference between a sampling time and a transmission time of a packet at the server so as to allow the server to carry out said adapting based on the target shift amount (pp 0107, 0110).

As per claim 4, Bo teaches the method of claim 1, wherein said at least one parameter comprises a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled so as to allow the server to carry out said adapting based on the number (pp 0107, 0110).

As per claim 5, Bo teaches the method of claim 1, further comprising the step of adapting a sampling rate to the transmission rate in the server based on said at least one parameter (network connection; pp 0092-0095).

As per claim 6, Bo teaches the method of claim 1, wherein said at least one parameter comprises a clock shift amount for preventing playout disruption in the client (pp 0114-0116, 0128-0135).

As per claim 7, Bo teaches the method of claim 1, wherein said adapting comprises an adjustment of a transmission rate (pp 0112).

As per claim 8, Bo teaches the method of claim 1, wherein said adapting comprises an adjustment of a sampling rate (pp 0195, 0194).

As per claim 9, Bo teaches the method of claim 1, wherein said adapting comprises an adjustment of both a transmission rate and a sampling rate (pp 0112, 0194, 0195).

As per claim 10, Bo teaches the method of claim 1, wherein said at least one parameter comprises:

Art Unit: 2157

a minimum shift amount indicative of a difference between a sampling time and a transmission time of a packet at the server (pp0107, 0110);

a target shift amount indicative of a shift amount greater than a difference between a sampling time and a transmission time of a packet at the server (pp 0107; 0110);

a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled (pp 0195, 0194); and

a clock shift amount, and wherein two or more of the minimum shift amount, the target shift amount, the specifying number and the clock are sent together to the server (pp 0114-0116; 0128-0135).

Claims 11-20, 21-25, 26-31 and 32-36 are rejected under the same rationale as claims 1-10 because they disclose a system, software code, terminal and network element employing the method of claims 1-10.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Choi US Patent No. 5,999,226

6. Mukherjee US Patent Publication No. 2004/0010614

7. Riddle US Patent No. 6,175,856

8. Higashiyama 2003/0097460

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995.

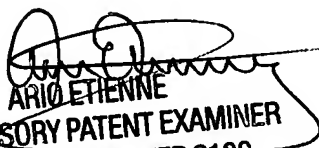
The examiner can normally be reached on Monday-Tuesday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam
Ua
April 27, 2007


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